

## **Product datasheet for RC200624L3**

# COX10 (NM\_001303) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** COX10 (NM\_001303) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: COX10

Synonyms: MC4DN3

Selection:

**Mammalian Cell** 

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

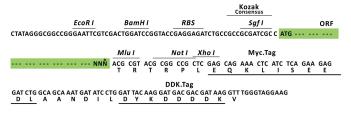
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200624).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001303

ORF Size: 1329 bp



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#### COX10 (NM\_001303) Human Tagged Lenti ORF Clone - RC200624L3

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 001303.2</u>

RefSeq Size:3016 bpRefSeq ORF:1332 bpLocus ID:1352

UniProt ID: Q12887
Cytogenetics: 17p12
Domains: UbiA

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Metabolic pathways, Oxidative phosphorylation, Porphyrin and chlorophyll metabolism

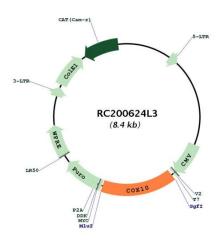
MW: 48.9 kDa



#### **Gene Summary:**

Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes heme A:farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion. [provided by RefSeq, Jul 2008]

### **Product images:**



Circular map for RC200624L3